**K-5 Math Lesson Plan**

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| **Teacher:** Herbin, Tennyson, Harris, Williams | | | **Grade:** 5th | | | | **Date(s)**: September 2012 | |
| **Unit Title:**  Understanding the Decimal Place Value System | | | | | **Corresponding Unit Task:** Lesson 3  2012 Summer Olympics— Who Gets the Gold? (Teach prior to task 3) | | | |
| **Essential Question(s):**  How can I use place value understanding to round decimals to any place? | | | | | | | | |
| **Materials/Resources** | | | | | **Essential Vocabulary** | | | |
| **Teacher:**  Computer with internet capabilities, Ant Hill rounding picture, Rounding Numbers Powerpoint, K-5 Teaching Resource activity | | **Student:**  Paper, pencil, Glencoe McGraw Hill Practice Worksheet, Calculators | | | | Round | | |
| **Learning Experience** | | | | | | | | |
| **8 Mathematical Practices:**  √ 1. Make sense of problems and persevere in solving them.  √ 2. Reason abstractly and quantitatively.  3. Construct viable arguments and critique the reasoning of others.  √ 4. Model with mathematics.  √ 5. Use appropriate tools strategically.  √ 6. Attend to precision.  √ 7. Look for and make use of structure.  √ 8. Look for and express regularity in repeated reasoning. | **Common Core State Standards:**  **5.NBT.4**  Use place value understanding to round decimals to any place. (Correlates to NCSCOS Math Objective 1.01) | | | | | | | |
| **I Can Statement(s):**   * I can round a decimal to the tenths place. * I can round a decimal to the hundredths place. * I can round a decimal to the thousandths. | | | | | | | |
| **Activating Strategy/Hook:** (How will students become cognitively engaged and focused?)  Watch Video on The Rounding Rap. Video Title: [Rounding Rap](https://gaggle.net/gaggleVideoProxy.do?op=view&v=5e73fe10e966e73f07e5e10eaeb6485c) found at <http://www1.gcsnc.com/gagglelogin.html> , use your GCS username and password (first three of last name, last four of social) to access. | | | | | | | |
| **Teacher Directed:**  Using the ant hill to learn to round. Show students the Ant Hill Rounding picture (below).    Explain to students that the ants walking up the hill remind you to round up and the ants walking across the hill remind you to stay the same. Therefore when you round a number you follow the following steps.   1. Look at the number. 2. Underline the place you are rounding to. 3. Circle the number to the right. 4. Find that number on the ant hill. If it is 5 or more, round the underlined number up by one. If it 4 or less, leave the underlined number the same. 5. Make all of the numbers after the underlined digit zeros.   Practice with the following numbers.  6.38 (tenths) 3.814 (hundredths) 14.972 (ones) 56.1 (tens) | | | | | | | |
| **Guided Practice:**  Using Rounding Numbers Powerpoint, guide students through the slides and stop and discuss problems and how the students can round the numbers while connecting to the Ant Hill Rounding Picture.  [http://www.authorstream.com/Presentation/bellaonline-169043-rounding-numbers-math-4th-grade-school-education-ppt-powerpoint/](https://webmail.gcsnc.com/owa/redir.aspx?C=7408be64988841abb629a60cbbc1d848&URL=http%3a%2f%2fwww.authorstream.com%2fPresentation%2fbellaonline-169043-rounding-numbers-math-4th-grade-school-education-ppt-powerpoint%2f) | | | | | | | |
| **Independent Practice:**  Print the attached worksheet <http://glencoe.mcgraw-hill.com/sites/dl/free/0078740428/589238/m1_nat_wpwb.pdf> to allow students to practice rounding decimals. (Glencoe McGraw Hill Word Problem Practice Workbook) | | | | | | | |
| **Closing/Summarizing Strategy:**  Give each student a calculator and show them the steps to rounding. | | | | | | | |
| **Differentiation Strategies** | | | | | | | | |
| **Extension** | | | | **Intervention** | | | | **Language Development** |
| This game to help the students practice their rounding off decimals concepts. Here are the steps:   * Group students into groups of 4-5 students. * Give 4-5 blank cards to each student. * Ask the students to write down a decimal number with the rounding off order in the bracket (2 or 1 decimal point) on each card. * Ask one student to shuffle and pile the cards into one stack. * Each student will take turns to draw a card and round off the decimal number according to the order on the card. * Students who can answer correctly can have the card. * Students with most card is the winner.   You can collect all the cards for your math center. For my class, I clipped them and put a letter on each pile. I stuck the pile on the wall so fast finishers could play with them.  This game is simple, needs only a little amount of resource and, most importantly, it was very effective to help the students practice the concept.  Picture | | | | A Rhyme to help with Rounding to a Particular Place Value.  Circle your number  Look next door  5 or greater  Add one more  Numbers to the left  Stay the same  Numbers to the right  Zero's your name! Example 1: Round 1,618.52 to the nearest tenth.Solution: Look at the number being rounded. Since 1,618.52 is being rounded to the nearest tenth, look to the right at the digit in the hundredths place. 1,618.5**2** The digit in the hundredths place is less than five, so the 5 in the tenths place will not round up, and all the digits to the right of the ones place will become zeros. 1,618.**5**0  So, 1,618.52 rounded to the nearest tenth is **1,618.5**. Example 2: Round 1,618.52 to the nearest whole number.Solution: Look at the number being rounded. Since 1,618.52 is being rounded to the nearest whole number, look to the right at the digit in the tenths place. 1,618.**5**2  The digit in the tenths place is greater than or equal to five, so the 8 in the ones place will round up to 9, and all the digits to the right of the ones place will become zeros. 1,61**9**.00  So, 1,618.52 rounded to the nearest whole number is **1,619**. | | | | To increase student understanding of rounding decimal numbers, students can be guided through the activity linked below (see end of plan).  <http://www.k-5mathteachingresources.com/support-files/roundingdecimalstothenearesthundredth.pdf> |
| **Assessment(s):** Collect independent work to check for accuracy. | | | | | | | | |
| **Teacher Reflection:** (Next steps?)  • What went well?  • Student understanding/misconceptions.  • Specific notes about students’ thinking.  • What do I need to reteach/review tomorrow or in the future?  • New ideas or changes for next time? | | | | | | | | |

*Language Development Activity*

